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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/542,890      | 08/09/2005  | Hiroshige Ishino     | 237632              | 8389             |

23460 7590 02/28/2007  
LEYDIG VOIT & MAYER, LTD  
TWO PRUDENTIAL PLAZA, SUITE 4900  
180 NORTH STETSON AVENUE  
CHICAGO, IL 60601-6731

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| EXAMINER |
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VALENROD, YEVGENY

|          |              |
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| ART UNIT | PAPER NUMBER |
|----------|--------------|

1621

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 02/28/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|                              |                                      |                                      |  |
|------------------------------|--------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/542,890 | <b>Applicant(s)</b><br>ISHINO ET AL. |  |
|                              | <b>Examiner</b><br>Yevgeny Valenrod  | <b>Art Unit</b><br>1621              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,9-11,14,15,17 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 9-11,14,15,17 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/20/05; 7/25/05</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Specification*

The specification filed on 7/25/05 is lacking priority information.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai et al. (US 5,886,211).

Instant claim 1 is directed to a catalyst composition comprising a palladium compound, an isocyanide of formula (I) and a base of formula (II). The intended use of the catalytic composition is for a telomerization reaction.

### *Scope of prior art*

Hirai et al. teach a composition comprising dichlorobis(triphenylphosphine) palladium (a palladium compound) and calcium hydroxide (a base of formula (II)) (column 11, example 4, line 16-palladium, line 18-calcium hydroxide).

### *Ascertaining the difference between prior art and the instant claim 1*

Hirai et al fail to teach presence of isocyanide in the composition of example 4. They also do not disclose the use of the composition for a telomerization reaction.

### *Obviousness*

Although Hirai et al. do not teach isocyanide in their example 4, they provide one skilled in the art with enough guidance to render the use of isocyanide in the described process obvious. The ligands on the palladium in example 4 of US 5,886,211 are triphenylphosphine (line 16) ligands. In column 7, lines 15-30 Hirai et al. teach ligands that can be used with palladium according their invention. In lines 29-30 of the same column isocyanides are described as chemical equivalents to the triphenylphosphine (column 7, line 16) ligands. One of ordinary skill in the art would find it obvious to substitute triphenylphosphine ligand for one of the listed isocyanide ligands thus arriving at the catalytic composition instantly claimed in claim 1. There is expectation of success that the isocyanide will work as well as the triphenylphosphine in the process described in Example 4. The instant composition is therefore obvious over Hirai et al.

The instant claim 1 also claims an intended use of the catalytic composition for a telomerization reaction of a conjugated diene and an alcohol. Such use is not described in US 5,886,211. However, it is well settled that the intended use of a composition or product (e.g. as a cosmetic composition) will not further limit claims drawn to a composition or product, so long as the prior art discloses the same composition comprising the same ingredients in an effective amount as instantly claimed. See, e.g., *Ex parte Masham*, 2 USPQ2d, 1647.

***Claim Objections / Allowable Subject Matter***

Claims 9-11, 14, 15, 17 and 21 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Closes prior art includes: US 5,886,211 ('211) and 5,198,598 ('598).

'211 renders obvious the catalytic composition of claim 1 (see 103 rejection above), however there is no teaching or suggestion directed to use of the said composition in a method of producing ethers as described in claim 9.

'598 teaches a method of producing ethers via telomerization reaction of diene with an alcohol in the presence of palladium. However, there is no teaching or suggestion directed to use of isocyanide in the described process.

### ***Conclusion***

Claims 1, 9-11, 14, 15, 17 and 21 are pending.

Claim 1 is rejected

Claims 9-11, 14, 15, 17 and 21 are objected to.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yevgeny Valenrod whose telephone number is 571-272-9049. The examiner can normally be reached on 8:30am-5:00pm M-F.

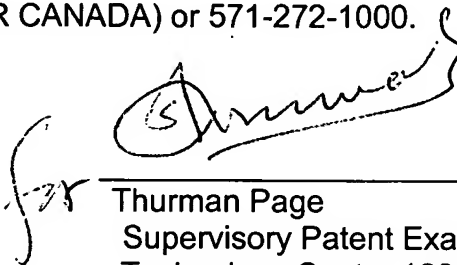
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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